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EXAMINER	
THAI, CUONG T	
ART UNIT	PAPER NUMBER
2173	7

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/911,663	Applicant(s) CIOLFI, JOHN EDWARD	
	Examiner CUONG T THAI	Art Unit 2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7,9,14 and 15* is/are rejected.

7)☒ Claim(s) *6,8 and 10-13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 March 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAIL ACTION

1. Claims 1-15 are presented for examination.

2. The formal drawings filed on March/11/2003 have been approved by Draftsman.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b) that form the basis for the rejections under this section made in this Office action:

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 4, 7, 9, and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by McKaskle et al. (USPN: 5,481,741) hereinafter McKaskle.

As per claims 1 (method), 14 (computer readable medium), and 15 (system); McKaskle discloses a method of manipulating graphical block diagram block parameters in a graphical block diagram modeling environment, comprising:

Receiving a graphical block diagram of blocks for a model developed by a user is taught by McKaskle as the technique of a system for modeling a process (see col. 6, lines 48-49) including the block diagram editor 30 is used to construct and display a graphical diagram, referred to as a block diagram, which visually displays a procedure by which a value for a input variable produces a value for one or more output variables ... the block diagram editor 30 constructs instructions in the machine language which execute the block diagram created by the user (see col. 11, lines 55-67); and

Processing parameters specified for each of the blocks by the user to produce run-time parameters is taught by McKaskle as the technique of a system and method, which

allows a user to programmatically access various parameters of a control or indicator. In this manner, a user can programmatically make changes that affects the output or appearance of controls and indicators (see col. 5, lines 47-51) and as indicated in Fig. 8B, a solid line with an arrow is used to indicate a potential one-to-many relationship, i.e., the source object contains zero or more destination objects. A dashed line with an arrow is used to indicate a potential one-to-one relationship, i.e., the source object may reference zero or one destination object (see col. 15, lines 1-8).

These claims are therefore rejected for the reasons as set forth above.

As per claim 2, McKaskle discloses wherein the run-time parameters comprise non-interfaced parameters as the technique of there are two special variables which behave as constants within the body of the iterative loop structure: the number of iterations, N, and the iteration number of index, i (see col. 26, lines 49-51), and

Wherein processing comprises: determining which of the non-interfaced parameters having matching values is taught by McKaskle as the technique of in the step 620 the execution subsystem determines the current value or setting for the control's or indicator's attribute. This essential involves reading the attribute from the memory location where the attribute is stored. In step 622 the execution subsystem translates the value or setting to match the type descriptor (see col. 58, lines 18-27), and

Defining a pooled parameter to represent the non-interfaced parameter having matching values in references to such non-interfaced parameters is taught by McKaskle as the technique of translating value to match type description and write into data pointer (see block 622 in Fig. 131) and this verify or translation step involve translating the attribute to conform to the data type that the block diagram editor required. This attribute

is then used by the block diagram editor during execution of the VI as programmed by the user (see col. 58, lines 36-40).

This claim is therefore rejected for the reasons as set forth above.

As per claim 4, due to the similarity of this claim to the step of determining which of the non-interfaced parameters having matching values in claim 2, this claim is therefore rejected for the same reasons applied to claim 2.

As per claim 7, the limitation of wherein the run-time parameters comprises an interfaced parameter expression is taught by McKaskle as the technique of Formula Node of Y= X ^ 2 + x + 1 (see Fig. 110) and referring to Fig. 108, the Formula Node is placed on the block diagram by selecting it from the Struct & Constants palette of the Function menu (Fig. 71). The Formula Node is a resizable box that id used to enter algebraic formulas directly into the block diagram. This feature is extremely useful when the function equation has many variables or is other complicated (see col. 51, lines 2-9), and the limitation of wherein the processing comprises creating a structure for the interfaced parameter expression to enable user access to an interfaced variable in the interfaced parameter expression while the model is being under executed is taught by McKaskle as the technique of with the Formula Node, the user can directly enter a complicated formula, or formulas, in lieu of creating block diagram subsections. The input and output terminals of the Formula Node are created by popping up on the border of the node and choosing Add Input from the pop up menu (see col. 51, lines 14-20) and a system and method which allows a user to programmatically access various parameters of a control

or indicator. In this manner, a user can programmatically make changed that affects the output or appearance of controls and indicators. A user can also access these parameters interactively during execution of a block diagram (see col. 5, lines 47-53). This claim is therefore rejected for the reasons as set forth above.

As per claim 9, the limitations of wherein processing comprises: evaluating the parameters to determine numerical values and evaluating the parameters to construct a data structure describing any of the parameters that includes an interfaced variable are taught by McKaskle as the technique of translating value to match type description and write into data pointer (see block 622 in Fig. 131), this translating step is verifying or translation step involve translating the attribute to conform to the data type that the block diagram editor required. This attribute is then used by the block diagram editor during execution of the VI as programmed by the user (see col. 58, lines 36-40) and the parameters of a control or indicator on the front panel which can be programmatically accessed according to the present invention are referred to as attributes (see col.5, lines 59-61); an attribute node allows two type of operations, these being reading from an attribute or writing to an attribute node. These operations of reading and writing an attribute can be performed either by a block diagram during execution or interactively by the user during execution. The process of writing to an attribute node refers to the execution subsystem updating an attribute of a control in the front panel display to reflect an attribute that has been set programmatically in the block diagram. Reading an attribute node refers to the execution subsystem reading the value of an attribute for a certain control during block diagram execution that may have been changed by the user, or may

have been changed during execution of a VI by the execution subsystem (see col. 6, lines 8-24).

This claim is therefore rejected for the reasons as set forth above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKaskle et al. (USPN: 5,481,741) hereinafter McKaskle in view of McDonald et al. (USPN: 5,966,532) hereinafter McDonald.

As per claim 3, McKaskle discloses the invention substantially as claimed above. While McKaskle discloses the pooled parameter as the technique of translate value to match type description and write into data pointer (see block 622 in Fig. 131) and this verify or translation step involve translating the attribute to conform to the data type that the block diagram editor required. This attribute is then used by the block diagram editor during execution of the VI as programmed by the user (see col. 58, lines 36-40).

McKaskle, however, does not disclose the limitation of defining a structure to enable code generation from the model.

McDonald discloses the limitation of defining a structure to enable code generation from the model as the technique of the user initiates a graphical code generation wizard for the control. In the preferred embodiment, the user "pops up" on the control with the mouse and selects the graphical code generation wizard from the menu. Alternatively, the user selects the control from the special palette comprising only the first plurality of controls having an associated graphical code portion or template. In this embodiment, selection of control from this palette automatically initiates the graphical code generation wizard (see col. 4, lines 20-28).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include McDonald's teaching of defining a structure to enable code generation from the model into that of McKaskle's polling parameter in object modeling environment invention. By doing so, the system would be enhanced by capable of allowing user selects code generation wizard template from menu for creating graphical object modeling based on user graphical based interface accordingly to user's desired manner.

As per claim 5, due to the similarity of this claim to the combination of claim 2 (limitation a) and claim 4, this claim is therefore rejected for the same reasons applied to claims 2 and 4.

Allowable Subject Matter

7. Claim 6 is objected as being dependent upon a rejected based claim, but would be allowable if rewritten in independent form including all of the limitations of the based claim and any intervening claims. Claims 8 and 10-13 are dependent on objected claim 6.

8. The following is an Examiner's statement of reasons for allowance:

Examiner has carefully considered claim 6 drawn to a method of manipulating graphical block diagram block parameters in a graphical block diagram modeling environment comprising processing parameters for determining non-interfaced parameters match a given criterion, wherein the given criterion requires **an exact match between a value of one of the non-interfaced parameters and a value of at least one other of non-interfaced values after a data matching function is applied to the value of the at least one other of the non-interfaced parameters**. None of the cited art of the record including McDonald et al. (USPN: 5,966,532), Hsu (USPN: 6,138,270), Bailey et al. (USPN: 6,684,385), Chang et al. (USPN: 5,627,979), Paterson et al. (USPN: 6,069,629), Uczekaj et al. (USPN: 5,920,718), Sojoodi et al. (USPN: 6,437,805), and McKaskle et al. (USPN: 5,481,741) discloses, suggests, nor teaches the method of wherein the given criterion requires **an exact match between a value of one of the non-interfaced parameters and a value of at least one other of non-interfaced values after a data matching function is applied to the value of the at least one other of the non-interfaced parameters.** Specially, McKaskle et al. (USPN: 5,481,741) suggests constant non-interfaced parameters N and i (see col. 26, lines 49-51) and the step 620 the execution subsystem determines the current value or setting for the control's or indicator's attribute. This essential involves reading the attribute from the memory

location where the attribute is stored. In step 622 the execution subsystem translates the value or setting to match the type descriptor (see col. 58, lines 18-27) and matching translating value to the type description and write into data pointer (see block 622 in Fig. 131). McKaskle, however, clearly lacks from the teaching of requiring **an exact match between a value of one of the non-interfaced parameters and a value of at least one other of non-interfaced values after a data matching function is applied to the value of the at least one other of the non-interfaced parameters.**

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. 111© to consider these references fully when responding to this action. The documents cited therein teach a method of accessing, editing, linking, and updating object's parameter/attribute values in graphical object modeling environment.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG T THAI whose telephone number is (703) 308-7234. The examiner can normally be reached on 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Cabeca, can be reached at (703) 308-3116.

The fax numbers for the organization where this application or proceeding is assigned are as follows:

(703) 746-7238 (After Final Communication)

(703) 872-9306 (Official Communication)

(703) 746-7240 (For status inquiries, Draft Communication).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8000.

CUONG T THAI

Examiner

Art Unit 2173

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February 18, 2004

RAYMOND J. BAYERI
PRIMARY EXAMINER
ART UNIT 2173